



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,541	10/31/2002	Jeffrey M Becker	1046-PCT-US-00	7890

7590

01/12/2005

IP Department of Piper Rudnick LLp
3400 Two Logan Square
18th and Arch Streets
Philadelphia, PA 19103-2762

EXAMINER

AKHAVAN, RAMIN

ART UNIT PAPER NUMBER

1636

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

1/10/05

Office Action Summary	Applicati n No. 09/914,541	Applicant(s) BECKER ET AL	
	Examiner Ramin (Ray) Akhavan	Art Unit 1636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondenc address --
Period f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disp sition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-18 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-18 are pending and under consideration in this action.

Election/Restriction

Restriction is required under 35 U.S.C. 121 and 372. This application contains the following inventions or groups of inventions, which are not so linked as to form a single inventive concept under PCT Rule 13.1. In accordance with 37 CFR 1.499, applicant is required to elect a single invention to which the claims must be restricted. The groups are as follows (each group designated with a roman numeral):

- I. Claims 1-3 and 1-18, directed to a process for obtaining an enkephalin transport protein.
- II. Claims 4-6, directed to an antifungal composition comprising dideoxynucleotides, nucleotide analogues or nucleoside analogues and 5-fluorotic acid.
- III. Claims 4-6, directed to an antifungal composition consisting of N3-(4-methoxyfumaroyl)-L-2,3 diaminopropanoic acid.
- IV. Claims 4-7, directed to an antifungal amino acids consisting of oxalysine.
- V. Claims 4-7, directed to an antifungal amino acids consisting of fluorophenylalanine.
- VI. Claims 4-7, directed to an antifungal amino acids consisting of ehtionine.
- VII. Claims 4-7, directed to an antifungal amino acids consisting of unusual D-amino acids.
- VIII. Claims 8-9, directed to a process of reducing antifungal growth.
- IX. Claims 10-11 and 12-14, directed to a vector, plant cells and a method for cultivating plant material.

Art Unit: 1636

The inventions listed in groups I-IX do not related to a single general inventive concept under PCT Rule 13.1 because under Rule PCT 13.2, unity of invention exists only when there is a technical relationship among the claimed inventions involving one or more of the same corresponding special technical features (i.e. technical features that define a contribution which each of the inventions considered as a whole makes over the prior art). Each of the four inventions is directed to a distinct special technical feature.

In Group I the special technical feature is directed to a process for obtaining a enkephalin transport enkephalin transport proteins, involving specific steps and ultimately directed to obtaining a product, none of which are apparent in any of the other groups. For example, the group I invention encompasses a process to obtain enkephalin transport proteins, a composition not present in any of the other groups. In addition, the process entails a step of deleting a yeast cell (*OPT1Δ* yeast strain), which is not shared with any other group. In sum, group I is directed to a special technical feature that is not shared with any other group.

Groups II-VII encompass a specific composition, each group directed to a unique structure that constitutes a biologically and patentably distinct special technical feature. For example, the groups are directed to disparate compounds such as chemical compounds, nucleotide analogues and amino acids. (e.g., claim 6). In addition, each of the amino acids constitutes a special technical feature based on their distinct structures. (e.g., claim 7).

Group VIII is directed to the special technical feature of reducing or preventing fungal growth, where the process entails critical elements of dosage and delivery (i.e., effective amount) for an antifungal composition.

Art Unit: 1636

Therefore, the process is defined by the critical steps and elements that would be necessary to reduce or prevent growth altogether. On whole, the process entails special technical features that are simply not required for any of the other inventions.

Group IX is directed to a vector comprising a nucleic acid molecule encoding a specific protein of SEQ ID NO: 2, as well as cells transformed with said vector and a method of using said vector. However, none of the preceding groups share this special technical feature.

In sum, each of the preceding inventions is directed to distinct processes or compositions or both products and processes, where each invention encompasses a special technical feature that is not shared amongst the various groups. As such, there is a lack of unity amongst the various invention, thus restriction is appropriate.

Conclusion

Claims 1-18 encompass 10 distinct inventions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramin (Ray) Akhavan whose telephone number is 571-272-0766. The examiner can normally be reached on Monday- Friday from 8:00-4:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Remy Yucel, Ph.D. can be reached on 571-272-0781. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully submitted,

Ray Akhavan/AU 1636


GERRY LEFFERS
PRIMARY EXAMINER